

CLAIMS

WHAT IS CLAIMED IS:

1. A method of protecting data comprising the acts of:

creating a first process associated with a first address space;

5 creating a second process associated with a second address, said
first address space being inaccessible to said second process;

 running, in said first process, a first software object which stores
the data in said first address space;

 running, in said second process, a second software object which
10 accesses said second address space; and

 directing, by said first software process, an action performable by
said second software process.

2. The method of claim 1, wherein the data comprises encrypted content,
15 and wherein said act of running said first software object comprises the act of:

 starting in said first process an application which renders said
encrypted content.

3. The method of claim 2, wherein said encrypted content comprises
20 text.

4. The method of claim 2, wherein said encrypted content comprises
video

25 5. The method of claim 2, wherein said encrypted content comprises
audio.

6. The method of claim 1, wherein the data comprises a cryptographic key, and wherein said act of running said first software object comprises the act of:

starting in said first process an application which uses said cryptographic key.

5

7. The method of claim 1, wherein said act of running a second software object comprises the acts of:

starting, in said second process, a hosting application;

hosting said second software object by said hosting application.

10

8. The method of claim 7, wherein said act of starting a hosting application comprises starting a component object model server.

9. The method of claim 1, wherein said second software object comprises a web browser which imports, from a remote computing device, code which accesses said second address space.

15

10. The method of claim 1, wherein said method is performed in a computing device having a display associated therewith, said method further comprising the acts of:

20

rendering the output of said first software object in a first window having a first region on said display; and

rendering the output of said second software object in a second window different from said first window, said second window having a second region on said display.

25

11. The method of claim 10, wherein said second region at least partly coincides with said first region.

12. The method of claim 11, wherein said second window is wholly enclosed within said first window.

5 13. The method of claim 1, wherein said directing act comprises calling a method on an interface exposed by said second process.

10 14. The method of claim 13, wherein said second software object comprises a web browser, and wherein said method instructs said web browser to retrieve a web page from a remote location.

15 15. A computer-readable medium having computer-executable instructions to perform the method of claim 1.

20 16. A system for integrating a secure application with an open application on a computing device including a processor, said computing device further including an operating system which provides a plurality of processes, each process having an address space associated therewith, said system comprising:

25 a first application executable on said processor in a first of said plurality of processes having a first address space, wherein said first application accesses protected data in said first address space, and wherein said first application provides a service by using a pre-determined software object;

 a second application executable on said processor in a second of said plurality of processes having a second address space, wherein said second application hosts said pre-determined software object, and wherein said second application exposes a callable interface to said first application, said first address space being inaccessible to said second process.

17. The system of claim 16, wherein said first application directs the actions of said pre-determined software object by communicating instructions to said second application through said callable interface.

5 18. The system of claim 16, wherein said pre-determined software object comprises a web browser which imports, from a remote computing device, code which executes on said processor and which accesses data in an address space associated with a process in which said pre-determined software object executes.

10 19. The system of claim 16, wherein said first application protects said protected data from observation or modification.

20. The system of claim 16, wherein said computing device is coupled to a display, wherein said first application creates a first window in which said first application renders its output, said first window defining a first region on said display, and wherein said second application creates a second window in which said pre-determined software object renders its output, said second window being different from said first window, said second window defining a second region on said display.

20 21. The system of claim 20, wherein said second region coincides at least in part with said first region.

22. The system of claim 21, wherein said second window is wholly enclosed within said first window.

25

23. The system of claim 20, wherein said second window comprises a child of said first window.

24. The system of claim 16, wherein said first application instantiates one or more of: (a) said second application; or (b) the hosting of said pre-determined software object.

5 25. A method of using a first software object and a second software object on a computing device which includes a display, the method comprising the acts of:

 running the first software object in a first process, said first process being associated with a first address space;

10 running the second software object in a second process, said first address space being inaccessible to said second process;

 creating a first window in which said first software object renders output, said first window being defined by a first region on the display; and

 creating a second window in which said second software object
15 renders output, said second window being defined by a second region on the display which coincides at least partly with said first region.

26. The method of claim 25, wherein said second window is wholly enclosed within said first window.

20

27. The method of claim 25, wherein said act of running the second software object comprises:

 starting a hosting application; and

 hosting said second software object within said hosting
25 application.

28. The method of claim 27, wherein said hosting application comprises a component object model server, and wherein said method further comprises the act of:

5 said hosting application exposing to said first process a method callable on said component object model server.

29. The method of claim 25, wherein said first software object comprises instructions which store one or more of (a) content, or (b) a cryptographic key, in said first address space, and wherein said act of running the second software object
10 comprises:

 running a program which imports executable instructions from a remote computer and which executes said executable instructions in said second address space.

30. The method of claim 25, wherein said executable instructions
15 comprise a web browser.

31. A compute-readable medium having computer executable instructions to perform the method of claim 25.